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File No. MA16034/05/0038

Project No.	AM1 - Tin Hau	ı Temple					
Date:	9-0	Dct-22	Next Due Date:	9-Dec-22	Operator:	SK	
Equipment No.:	A-	01-05	Model No.:	GS2310	Serial No.	10599	
			Ambient Condit	ion			
Temperatu	ure, Ta (K)	300.1	Pressure, Pa (mml	Hg)	762.4		

Orifice Transfer Standard Information							
Serial No. 3864 Slope, mc 0.05922 Intercept, bc -0.02420							
Last Calibration Date:	Last Calibration Date: 31-Jan-22 $mc x Qstd + bc = [\Delta H x (Pa/760) x (298/Ta)]^{1/2}$						
Next Calibration Date: 31-Jan-23 $Qstd = \{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc \} / mc$							

Calibration of TSP Sampler						
Calibration		Orfice		HVS		
Point	ΔH (orifice), in. of water	$[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis	
1	13.3	3.64	61.87	9.8	3.12	
2	10.4	3.22	54.76	7.3	2.70	
3	7.6	2.75	46.87	5.4	2.32	
4	5.5	2.34	39.93	3.4	1.84	
5	3.3	1.81	31.02	1.9	1.38	
By Linear Regr Slope , mw =	ession of Y on X 0.0568		Intercept, bw :	-0.393	9	
Correlation	coefficient* =	0.9989	-			
*If Correlation C	Coefficient < 0.990), check and recalibrate.				
		Set Point C	alculation			
From the TSP Fi	eld Calibration Cu	urve, take Qstd = 43 CFM				
From the Regres	sion Equation, the	e "Y" value according to				
		$\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \mathbf{x}]$	x (Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (mv	$(x + bw)^2 x (760 / Pa) x (760 / Pa)$	Ta / 298) =	4.22		
Remarks:						
Conducted by:	Wong Shi	ng Kwai Signature:	R	火.	Date: 10-Oct-22	
Checked by:	Henry I	Leung Signature:	-lem	J Xm J	Date: 10-Oct-22	



File No. MA16034/08/0038

Project No.	AM2 - Sai Tso Wan Recreation Ground						
Date:	9-0	Dct-22	Next Due Date:	9-Dec-22	Operator:	SK	
Equipment No.:	A-	01-08	Model No.:	GS2310	Serial No.	1287	
			Ambient Condit	ion			
Temperatu	ıre, Ta (K)	300.1	Pressure, Pa (mml	Hg)	762.4		

Orifice Transfer Standard Information							
Serial No. 3864 Slope, mc 0.05922 Intercept, bc -0.02420							
Last Calibration Date:	Last Calibration Date: 31-Jan-22 $\operatorname{mc} \mathbf{x} \operatorname{Qstd} + \mathbf{bc} = [\Delta \mathbf{H} \mathbf{x} (\mathbf{Pa}/760) \mathbf{x} (298/\mathbf{Ta})]^{1/2}$						
Next Calibration Date: 31-Jan-23 $Qstd = \{ [\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2} - bc \} / mc \}$							

Calibration of TSP Sampler							
Calibration		Orfice			HVS		
Point	ΔH (orifice), in. of water	$[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis		
1	13.5	3.67	62.33	9.5	3.08		
2	10.7	3.26	55.54	7.0	2.64		
3	7.9	2.81	47.78	5.4	2.32		
4	5.5	2.34	39.93	3.7	1.92		
5	3.3	1.81	31.02	2.2	1.48		
By Linear Regr Slope , mw = Correlation *If Correlation C	ession of Y on X 0.0499 coefficient* = Coefficient < 0.990	0.9984), check and recalibrate.	Intercept, bw = 	-0.076	1		
From the TSP Fi From the Regres Therefore, Se	Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W x (Pa/760) x (298/Ta)]^{1/2}$ Therefore, Set Point; W = (mw x Qstd + bw) ² x (760 / Pa) x (Ta / 298) =						
Remarks:							
Conducted by: Checked by:	Wong Shi	ng Kwai Signature Leung Signature	: :lem	N. Janj	Date: 10-Oct-22 Date: 10-Oct-22		

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File No. MA16034/03/0038

Project No.	AM3 - Yau La	i Estate, Bik Lai				
Date:	9-0	Dct-22	Next Due Date:	9-Dec-22	Operator:	SK
Equipment No.:	A-	01-03	Model No.:	GS2310	Serial No.	10379
			Ambient Condition	n		
Temperatu	re, Ta (K)	300.1	Pressure, Pa (mmHg	g)	762.4	

Orifice Transfer Standard Information							
Serial No. 3864 Slope, mc 0.05922 Intercept, bc -0.02420							
Last Calibration Date:	31-Jan-22	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$					
Next Calibration Date: 31-Jan-23 $Qstd = \{ [\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2} - bc \} / mc \}$							

Calibration of TSP Sampler							
Calibration		Orfice		HVS			
Point	ΔH (orifice), in. of water	$[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/760 Y-	0) x (298/Ta)] ^{1/2} axis	
1	12.9	3.58	60.94	9.0	2	.99	
2	10.3	3.20	54.50	6.8	2	.60	
3	8.2	2.86	48.67	5.2	2	.28	
4	5.1	2.25	38.47	3.2	1	.79	
5	2.8	1.67	28.61	1.9	1	.38	
By Linear Regr Slope , mw = Correlation	By Linear Regression of Y on X Slope , mw = <u>0.0498</u> Intercept, bw = <u>-0.0959</u> Correlation coefficient* = <u>0.9972</u>						
*If Correlation C	Coefficient < 0.990), check and recalibrate.					
		Set Point C	alculation				
From the TSP Fi	eld Calibration Cu	urve, take Qstd = 43 CFM					
From the Regres	sion Equation, the	"Y" value according to					
Therefore, Se	et Point; W = (mv	$\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \mathbf{x}]$ w x Qstd + bw) ² x (760 / Pa) x (x (Pa/760) x (29 Ta / 298) =	98/Ta)] ^{1/2} 4.20			
Remarks:							
Conducted by:	Wong Shi	ng Kwai Signature:	k	<u>у</u> .	Date:	10-Oct-22	
Checked by:	Henry I	_eung Signature:	-lem	y drong	Date:	10-Oct-22	

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File No. MA16034/05/0039

Project No.	AM1 - Tin Ha	u Temple				
Date:	9-E	Dec-22	Next Due Date:	9-Feb-23	Operator:	SK
Equipment No.:	A-	01-05	Model No.:	GS2310	Serial No.	10599
			Ambient Condit	ion		
Temperatu	ire, Ta (K)	292.6	Pressure, Pa (mml	Hg)	761.7	

Orifice Transfer Standard Information							
Serial No. 3864 Slope, mc 0.05922 Intercept, bc -0.02420							
Last Calibration Date:	31-Jan-22	mc x Qstd + bc = $[\Delta H x (Pa/760) x (298/Ta)]^{1/2}$					
Next Calibration Date: 31 -Jan-23 Qstd = {[$\Delta H \times (Pa/760) \times (298/Ta)$] ^{1/2} -bc} / mc							

Calibration of TSP Sampler						
Calibration		Orfice		HVS		
Point	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis	
1	13.2	3.67	62.39	9.9	3.18	
2	10.4	3.26	55.43	7.3	2.73	
3	7.6	2.79	47.44	5.4	2.35	
4	5.6	2.39	40.78	3.4	1.86	
5	3.3	1.84	31.40	1.9	1.39	
Slope , mw = Correlation *If Correlation C	By Linear Regression of Y on X Slope , mw =0.0578 Intercept, bw =0.4421 Correlation coefficient =0.9983 *If Correlation Coefficient < 0.990, check and recalibrate.					
From the TSP Fi	eld Calibration C	Set Point C urve, take Qstd = 43 CFM	alculation			
From the Regres	sion Equation, the et Point; W = (mv	e "Y" value according to mw x Qstd + bw = [ΔW x v x Qstd + bw) ² x (760 / Pa) x (x (Pa/760) x (2 9 Ta / 298) =	98/Ta)] ^{1/2} 4.09		
Remarks:						
Conducted by:	Wong Shi	ng Kwai Signature:	k	×.	Date: 10-Dec-22	
Checked by:	Henry I	Leung Signature:	-len	J ang	Date: 10-Dec-22	



File No. MA16034/08/0039

							VIA10034/00/0039
Project No.	AM2 - Sai Tso	Wan Recreation	Ground				
Date:	9-Dec-22		Next Due Date: 9-F		Feb-23	Operator:	SK
Equipment No.:	A-0	1-08	Model No.:	G	\$2310	Serial No.	1287
			Ambient C	Condition	1		
Temperatu	ire, Ta (K)	292.6	Pressure, Pa	(mmHg)		761.7	
		Ori	fice Transfer Sta	ndard Inform	ation		
Seria	l No.	3864	Slope, mc	0.05922	Intercept	t, bc	-0.02420
Last Calibra	ation Date:	31-Jan-22]	mc x Qstd + bo	$c = [\Delta H \times (Pa/760)]$) x (298/Ta)] ¹	1/2
Next Calibr	ration Date:	31-Jan-23		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \mathbf{x}] \}$	(Pa/760) x (298/	[a)] ^{1/2} -bc} / n	nc
	T		Calibration of	TSP Sampler	T		
Calibration		Or	fice			HVS	1/2
Point	$\Delta H \text{ (orifice)},$ in. of water	[ΔH x (Pa/76	0) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/7	'60) x (298/Ta)] ^{1/2} Y-axis
1	13.4	,	3.70	62.86	9.5		3.11
2	10.7		3.30	56.21	7.0		2.67
3	7.9		2.84	48.36	5.4		2.35
4	5.5	,	2.37	40.42	3.7		1.94
5	3.3		1.84	31.40	2.1		1.46
By Linear Regression of Y on X Slope , mw =0.0511 Intercept, bw =0.1377 Correlation coefficient* =0.9982 *If Correlation Coefficient < 0.990, check and recalibrate.							
			Set Point C	alculation			
	iald Calibration (Curve, take Qstd	= 43 CFM				
From the TSP F	ielu Calibiation						
From the TSP F	ssion Equation, th	ne "Y" value acco	ording to				
From the TSP F	ssion Equation, th	ne "Y" value acco mw x Q	ording to std + bw = [ΔW x	x (Pa/760) x (29	98/Ta)] ^{1/2}		

Conducted by: <u>Wong Shing Kwai</u> Signature: <u>M</u> Date: <u>10-Dec-22</u> Checked by: <u>Henry Leung</u> Signature: <u>Lewy May</u> Date: <u>10-Dec-22</u>

Remarks:

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File No. MA16034/03/0039

Project No.	AM3 - Yau La	AM3 - Yau Lai Estate, Bik Lai House				
Date:	9-D	Dec-22	Next Due Date:	8-Feb-23	Operator:	SK
Equipment No.:	A-	01-03	Model No.:	GS2310	Serial No.	10379
			Ambient Conditi	on		
Temperatu	ıre, Ta (K)	292.6	Pressure, Pa (mmF	Ig)	761.7	

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	1	mc x Qstd + bo	$c = [\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]$] ^{1/2}
Next Calibration Date:	31-Jan-23		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \mathbf{x}] \}$	(Pa/760) x (298/Ta)] ^{1/2} -bc} /	mc

Calibration of TSP Sampler						
Calibration		Orfice		HVS		
Point	ΔH (orifice), in. of water	$[\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis	
1	13.0	3.64	61.92	9.0	3.03	
2	10.3	3.24	55.16	6.8	2.63	
3	8.2	2.89	49.26	5.2	2.30	
4	5.2	2.30	39.31	3.2	1.81	
5	2.8	1.69	28.96	2.0	1.43	
By Linear Regr Slope , mw = Correlation *If Correlation C	By Linear Regression of Y on X Slope , mw = 0.0488 Intercept, bw = -0.0484 Correlation coefficient* = 0.9957 *If Correlation Coefficient < 0.990, check and recalibrate.					
From the TSP Fi	eld Calibration C	Set Point C	alculation			
From the TSP Field Calibration Curve, take Qstd = 45 CFM From the Regression Equation, the "Y" value according to $\mathbf{mw} \mathbf{x} \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \mathbf{x} (\mathbf{Pa}/760) \mathbf{x} (298/\mathbf{Ta})]^{1/2}$						
Therefore, Set Point; $W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) =$ 4.12 Remarks:						
Conducted by: Checked by:	Wong Shi	ng Kwai Signature: Leung Signature:	K -lem	y Xong	Date: 10-Dec-22 Date: 10-Dec-22	



File No. MA20003/55/017

Project No.	CKL 2 - Flat 10	03 Cha Kwo Lir	ng Village			
Date:	5-N	lov-22	Next Due Date:	5-Jan-23	Operator:	SK
Equipment No.:	A-0	01-55	Model No.:	TE 5170	Serial No.	1956
			Ambient Conditi	ion		
Temperatu	ıre, Ta (K)	294.5	Pressure, Pa (mmH	Ig)	764.3	

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05922	Intercept, bc	-0.02420
Last Calibration Date:	31-Jan-22	1	mc x Qstd + bo	$c = [\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]$	$]^{1/2}$
Next Calibration Date:	31-Jan-23		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \mathbf{x}] \}$	$(Pa/760) \ge (298/Ta)]^{1/2} -bc\} /$	mc

Calibration of TSP Sampler						
Calibration		Orfice		HVS		
Point	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	$[\Delta W \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Y-axis	
1	12.5	3.57	60.63	9.6	3.13	
2	10.5	3.27	55.61	7.3	2.73	
3	8.4	2.92	49.78	5.5	2.37	
4	5.1	2.28	38.88	2.9	1.72	
5	2.7	1.66	28.40	1.7	1.32	
Slope , mw = Correlation (*) *If Correlation C	By Linear Regression of Y on X Slope , mw =0.0560 Intercept, bw :0.3652 Correlation coefficient* =0.9931 *If Correlation Coefficient < 0.990, check and recalibrate.					
Set Point Calculation Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = $[\Delta W x (Pa/760) x (298/Ta)]^{1/2}$						
Therefore, Set Point; $W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) =$ 4.11						
Remarks:						
Conducted by:	Wong Shi	ng Kwai Signature:	X	火.	Date: 5-Nov-22	
Checked by:	Henry I	Leung Signature:	-le-	g Xoz	Date: 5-Nov-22	

Report No.

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

: 00171



Issue Date : 01 Apr 2022

: HP00046 Application No. **Certificate of Calibration** Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Sample Description : Submitted equipment stated to be Integrating Sound Level Meter. Equipment No.: : N-12-05 Manufacturer: : BSWA Technology Other information : Model No. **BSWA 308** Serial No. 580287 Microphone No. 570610 Date Received : 25 Mar 2022

Test Period	30 Mar 2022 to 30 Mar 2022	
Test Requested	Performance checking for Sound Level Meter	
Test Method	The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which ar recommended by the manufacturer, or equivalent.	e e
Test conditions	Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%	
Test Result	Refer to the test result(s) on page 2.	

Remark : 1. Information of the sample description provided by the Applicant.2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

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Issue Date : 01 Apr 2022

Report No.:00171Application No.:HP00046

Certificate of Calibration

Measuring

equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.0	0.0	± 1.5
114.0	114.2	+0.2	± 1.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

Report No.

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

: 00181



Issue Date : 24 May 2022

: HP00060 Application No. **Certificate of Calibration** Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Sample Description : Submitted equipment stated to be Integrating Sound Level Meter. Equipment No.: : N-12-06 Manufacturer: : BSWA Technology Other information : Model No. **BSWA 308** Serial No. 580156 Microphone No. 580804 Date Received : 16 May 2022

Test Period	: 24 May 2022 to 24 May 2022
Test Requested	: Performance checking for Sound Level Meter
Test Method	: The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.
Test conditions	: Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%
Test Result	: Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

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Issue Date : 24 May 2022

Report No.:00181Application No.:HP00060

Certificate of Calibration

Measuring

equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	93.9	-0.1	± 1.5
114.0	114.1	+0.1	± 1.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

Report No.

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

: 00288



Issue Date : 10 Nov 2022

Application No. : HP00176 **Certificate of Calibration** Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Sample Description : Submitted equipment stated to be Sound Level Calibrator. Equipment No.: : N-13-03 Manufacturer: : SOUNDTEK Other information : Model No. ST-120 Serial No. 181001637 : 10 Nov 2022 Date Received Test Period : 10 Nov 2022 to 10 Nov 2022 : Performance checking for Sound Level Calibrator **Test Requested** Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent. **Test conditions** : Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

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Issue Date : 10 Nov 2022

Report No.:00288Application No.:HP00176

<u>Certificate of Calibration</u>

Measuring equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01
	-
Description	Sound Meter
Manufacturer	BSWA Technology
Model No.	BSWA 308
Serial No.	570183
Microphone No.	570605
Equipment No.	N-12-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 0.3
114.0	114.2	+ 0.2	± 0.5

- Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
 - 2. The indication value was obtained from the average of ten replicated measurement.

- End of report -



Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

a:1 , a ; .;c					
Sibata Scientif	Sibata Scientific Technology LTD.		Validity of Calibra	tion Record	29-Jan-23
LD-3B					
2Y6194					
SA-01-02		Sensitivity	0.001 mg/m3		
ampler No.:	A-01-03	Before Sensi	tivity Adjustment	578	
n Orifice No.:	3864	After Sensitiv	vity Adjustment	578	
	Calib	oration of 1 hr T	SP		
Laser Dust Monitor			HVS		
Total Count	Count / Minute X-axis		Mass concentration (µg/m ³) Y-axis		$\iota g/m^3$)
4080	68.0		133.0		
3600	60.0		115.0		
2880	48.0		94.0		
rage	58.7		114.0		
ession of Y on 1.93	X 442	Inter	cept, bw =	0.5263	
ation coefficien	.t* =0.	9975			
Factor , SCF h Volume Sam j	pler / Dust Meter, (μ g/m3)]	1.9		
	LD-3B 2Y6194 SA-01-02 umpler No.: n Orifice No.: Total Count 4080 3600 2880 rage ression of Y on 1.93 ation coefficien Factor , SCF Volume Samj	LD-3B	LD-3B 2Y6194 SA-01-02 Sensitivity umpler No.: A-01-03 Before Sensitivity n Orifice No.: 3864 After Sensitivity Calibration of 1 hr TS Count / Minute Total Count Count / Minute X-axis 4080 68.0 3600 60.0 2880 2880 48.0 rage ression of Y on X 1.9342 Inter Factor , SCF h Volume Sampler / Dust Meter, (μ g/m3)]	LD-3B 2Y6194 SA-01-02 Sensitivity 0.001 mg/m3 umpler No.: A-01-03 Before Sensitivity Adjustment n Orifice No.: 3864 After Sensitivity Adjustment Calibration of 1 hr TSP Calibration of 1 hr TSP Calibration of 1 hr TSP Total Count / Minute Total Count X-axis 4080 68.0 3600 60.0 2880 48.0 rage 58.7 ression of Y on X 1.9342 Intercept, bw = Factor , SCF h Volume Sampler / Dust Meter, (μ g/m3)]	LD-3B 2Y6194 SA-01-02 Sensitivity umpler No.: A-01-03 Before Sensitivity Adjustment 578 n Orifice No.: 3864 After Sensitivity Adjustment 578 Calibration of 1 hr TSP Calibration of 1 hr TSP Image Count / Minute Mass concentration (µ X-axis 4080 68.0 133.0 3600 60.0 115.0 2880 48.0 94.0 rage 58.7 114.0 ression of Y on X 1.9342 Intercept, bw = 0.5263 Factor , SCF h Volume Sampler / Dust Meter, (μ g/m3)] 1.9

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Limited)

Calibrated by:

Approved by: Project Manager (Henry Leung)



Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description:	Digital Dust Indicator		Date of Calibration 29		29-Nov-22
Manufacturer:	Sibata Scientific Technology LTD.	Validity of Calibration Record 29-Jan-23			
Model No.:	LD-5R				
Serial No.:	8Y2374				
Equipment No.:	SA-01-04	Sensitivity	0.001 mg/m3		
High Volume Sa	ampler No.: A-01-03	Before Sensiti	vity Adjustment	652	
Tisch Calibratio	n Orifice No.: <u>3864</u>	After Sensitivi	ty Adjustment	652	
	Ca	libration of 1 h	r TSP		
Calibration	Laser Dust Monitor	r		HVS	
Point	Mass Concentration (µg/m3) X-axis		Mass concentration (μg/m ³) Y-axis		
1	69.0		133.0		
2	62.0		115.0		
3	51.0		94.0		
Average	60.7		114.0		
By Linear Regi Slope , mw = Correlation co	ression of Y on X 	Intero	cept, bw =	-16.0526	<u>.</u>
	Se	et Correlation F	actor		
Particaulate Concentration by High Volume Sampler $(\mu g/m^3)$			114.0		
Particaulate Concentration by Dust Meter (µg/m ³)			60.7		
Measureing time, (min)				60.0	
Set Correlation	Factor, SCF				
SCF = [K=Hig	h Volume Sampler / Dust Meter, (μ	g/m3)]	1.9		

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by:

Approved by: len drag Project Manager (Henry Leung)



Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description:	Digital Dust Indicator		Date of Calibration 29		29-Nov-22
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibr	ation Record	29-Jan-23
Model No.:	LD-5R				
Serial No.:	8Y2373				
Equipment No.:	SA-01-05	Sensitivity	0.001 mg/m3	<u>.</u>	
High Volume Sa	ampler No.: <u>A-01-03</u>	Before Sensitiv	rity Adjustment	657	
Tisch Calibratio	n Orifice No.: <u>3864</u>	After Sensitivit	y Adjustment	657	
	Ca	libration of 1 hr	· TSP		
Calibration	Laser Dust Monitor	r		HVS	
Point	Mass Concentration (µg/m3) X-axis		Mass concentration (µg/m ³) Y-axis		
1	70.0		133.0		
2	64.0		115.0		
3	53.0		94.0		
Average	62.3		114.0		
By Linear Reg Slope , mw = Correlation co	ression of Y on X 	Interco	ept, bw =	-26.0404	<u>.</u>
	Se	et Correlation Fa	ictor		
Particaulate Cor	centration by High Volume Sampler	$(\mu g/m^3)$		114.0	
Particaulate Cor	icentration by Dust Meter ($\mu g/m^3$)		62.3		
Measureing time	e, (min)			60.0	
Set Correlation]	Factor, SCF				
SCF = [K=Hig	h Volume Sampler / Dust Meter, (µ	.g/m3)]	1.8	<u> </u>	

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by:

Approved by: len drag

Project Manager (Henry/Leung)



Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description:	Digital Dust Indicator		Date of Calibration		29-Nov-22
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibi	ration Record	29-Jan-23
Model No.:	LD-5R				
Serial No.:	972778				
Equipment No.:	SA-01-07 Sensitivity		0.001 mg/m3	_	
High Volume Sa	ampler No.: A-01-03	Before Sensitiv	vity Adjustment	735 CPM	
Tisch Calibratio	m Orifice No.: 3864	After Sensitivi	ty Adjustment	735 CPM	
	Ca	libration of 1 h	r TSP		
Calibration	Laser Dust Monitor	•		HVS	
Point	Mass Concentration (µg/	(m3)	Mas	ss concentration (µ	ug/m^3)
	X-axis		Y-axis		
1	63.0		133.0		
2	56.0		115.0		
3	45.0		94.0		
Average	54.7		114.0		
By Linear Regression of Y on X Slope , mw = <u>2.1437</u> Intercept, bw = <u>-3.1903</u> Correlation coefficient* = <u>0.9965</u>					
	Se	t Correlation F	actor		
Particaulate Concentration by High Volume Sampler ($\mu g/m^3$)			114.0		
Particaulate Concentration by Dust Meter $(\mu g/m^3)$			54.7		
Measureing time, (min)			60.0		
Set Correlation	Factor, SCF				
SCF = [K=Hig	h Volume Sampler / Dust Meter, (μ	2.1			

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by:

Approved by: Project Manager (Henry Leung)



Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description:	Digital Dust Indicator	_	Date of Calibration 29-Nov-2			
Manufacturer:	Sibata Scientific Techno	ology LTD.	Validity of Calib	ration Record	29-Jan-23	
Model No.:	LD-5R					
Serial No.:	972779					
Equipment No.:	SA-01-08	Sensitivity	0.001 mg/m3	_		
High Volume Sa	ampler No.: <u>A-01-03</u> Before Sensiti		ivity Adjustment	744 CPM		
Tisch Calibration	on Orifice No.: 3864 After Sensitiv		ity Adjustment	744 CPM		
	-	Calibration of 1 h	ır TSP			
Calibration	Laser D	ust Monitor		HVS		
Point	Mass Concer	ntration ($\mu g/m3$)	Mas	Mass concentration ($\mu g/m^3$)		
<u> </u>			Y-axis			
1	·'	67.0	<u> </u>	133.0		
2	÷	56.0	 	115.0		
3	· · · · · · · · · · · · · · · · · · ·	47.0				
Average	<u> </u>	56.7		114.0		
By Linear Regr Slope , mw = Correlation co	ression of Y on X <u>1.9385</u> Defficient* =	_ Inter 0.9948	cept, bw = -	4.1495		
		Set Correlation I	Factor			
Particaulate Con	centration by High Volur	me Sampler (µg/m ³)		114.0		
Particaulate Con	centration by Dust Meter	$(\mu g/m^3)$		56.7		
Measureing time	e, (min)			60.0		
Set Correlation I	Factor, SCF					
SCF = [K=Hig'	h Volume Sampler / Dug	st Meter, (µg/m3)]	2.0			

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by:



Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description:	Digital Dust Indicator		Date of Calibration 29-Nov-22		
Manufacturer:	Sibata Scientific Technology LTD.	Validity	of Calibration Record	29-Jan-23	
Model No.:	LD-5R				
Serial No.:	972780				
Equipment No.:	SA-01-09	Sensitivity 0.001	mg/m3		
High Volume Sa	ampler No.: <u>A-01-03</u>	Before Sensitivity Adju	stment 739 CPM		
Tisch Calibratio	n Orifice No.: <u>3864</u>	After Sensitivity Adjust	ment 739 CPM		
	Ca	libration of 1 hr TSP			
Calibration	Laser Dust Monitor	-	HVS		
Point	Mass Concentration (µg/	(m3)	Mass concentration ($\mu g/m^3$)	
	X-axis		Y-axis		
1	69.0		133.0		
2	59.0		115.0		
3	49.0		94.0		
Average	59.0		114.0		
By Linear Regr Slope , mw = Correlation co	ression of Y on X <u>1.9500</u> oefficient* = <u>0.9990</u>	=)		
	Se	t Correlation Factor			
Particaulate Con	centration by High Volume Sampler ($(\mu g/m^3)$	114.0		
Particaulate Concentration by Dust Meter ($\mu g/m^3$)			59.0		
Measureing time	e, (min)		60.0		
Set Correlation I	Factor, SCF				
SCF = [K=Hig	h Volume Sampler / Dust Meter, (u	g/m3)]	1.9		

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by:

Technical Officer (Wong Shing Kwai)

Approved by:

Project Manager (Henry Leung)



Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description:	Digital Dust Indicator		Date of Calibration2		29-Nov-22
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calib	ration Record	29-Jan-23
Model No.:	LD-5R				
Serial No.:	972781				
Equipment No.:	SA-01-10	Sensitivity	0.001 mg/m3	_	
High Volume Sa	ampler No.: <u>A-01-03</u>	Before Sensiti ⁻	vity Adjustment	734 CPM	
Tisch Calibratio	n Orifice No.: <u>3864</u>	After Sensitivi	ty Adjustment	734 CPM	
	Ca	libration of 1 h	r TSP		
Calibration	Laser Dust Monitor			HVS	
Point	Mass Concentration (µg/	m3)	Mas	ss concentration (µ	ug/m ³)
	X-axis		Y-axis		
1	71.0		133.0		
2	64.0			115.0	
3	52.0		94.0		
Average	62.3		114.0		
By Linear Regression of Y on X Slope , mw = <u>2.0199</u> Intercept, bw = <u>-11.9043</u> Correlation coefficient* = <u>0.9943</u>					
	Se	t Correlation F	actor		
Particaulate Concentration by High Volume Sampler ($\mu g/m^3$)				114.0	
Particaulate Cor	icentration by Dust Meter ($\mu g/m^3$)		62.3		
Measureing time	e, (min)		60.0		
Set Correlation	Factor, SCF				
SCF = [K=Hig	h Volume Sampler / Dust Meter, (μ	1.8			

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by:

Approved by: leng thoy Project Manager (Henry Leung)





Certificate of Calibration

Calibration Certification Information								
Cal. Date:	January 31	, 2022	Roots	meter S/N:	438320	Та:	294	°K
Operator:	Jim Tisch					Pa:	752.6	mm Hg
Calibration	Model #:	TE-5025A	Calil	orator S/N:	3864			0
								1
		Vol. Init	Vol. Final	ΔVol.	ΔTime	ΔΡ	Δн	
	Run	(m3)	(m3)	(m3)	(min)	(mm Hg)	(in H2O)	
	1	1	2	1	1.4490	3.2	2.00	
	2	3	4	1	1.0320	6.4	4.00	
	3	5	6	1	0.9160	7.9	5.00]
	4	7	8	1	0.8730	8.8	5.50	
	5	9	10	1	0.7230	12.7	8.00	
			[Data Tabula	tion]
				V/ Total V				1
	Vstd	Ostd	ΔH(<u>Pato</u>	$-)(\frac{1500}{Ta})$		Oa	√∆Н(Та/Ра)	
	(m3)	(x-axis)	(v-ax	is)	Va	(x-axis)	(v-axis)	
	0.9995	0.6898	1.41	69	0.9957	0.6872	0.8839	1
	0.9952	0.9643	2.003	37	0.9915	0.9608	1.2500	1
	0.9932	1.0843	2.240	02	0.9895	1.0802	1.3976	1
	0.9920	1.1363	2.349	96	0.9883	1.1321	1.4658	1
	0.9868	1.3649	2.833	37	0.9831	1.3598	1.7678	1
		m=	2.092	281		m=	1.31048	1
	QSTD	b=	-0.024	426	QA	b=	-0.01514]
		r=	0.999	93		r=	0.99993]
				Calculatio	ns			1
	Vstd=	ΔVol((Pa-ΔP)	/Pstd)(Tstd/Ta	a)	Va=	ΔVol((Pa-Δ	P)/Pa)	1
	Qstd=	Vstd/∆Time			Qa= Va/∆Time			1
			For subsequ	ent flow ra	te calculatio	ns:]
	Qstd=	1/m ((\\ \ \ \ \ \ \ \ \ \ \ \ \ \	Pa (Tstd Pstd Ta	-))-ь)	Qa=	1/m ((√∆F	l(Ta/Pa))-b)	
	Standard	Conditions]					-
Tstd:	298.15	°K				RECA	LIBRATION	
Pstd:	760	mm Hg						n n n 1000
	Кеу				US EPA reco	ommends a	nnual recalibratio	on per 1998
∆H: calibrat	or manomel	er reading (i	n H2O)		40 Code	or rederal l	Regulations Part	SU TO SI,
ΔP: rootsme	eter manom	eter reading	(mm Hg)		Appendix I	3 to Part 50	, Reference Meth	hod for the
Pa: actual al	arometric p	perature (K)	На)		Determinat	tion of Susp	ended Particulat	e Matter in
h: intercent	arometric pi	essure (mm	118/		th	e Atmosphe	ere, 9.2.17, page	30
m: slope								

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45 South Miami Avenue

illage of Cleves, OH 45002

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Certificate of Calibration - Wind Monitoring Station

Description:	Yau Lai Estate, Bik Lai House
Manufacturer:	Davis Instruments
Model No.:	<u>Davis7440</u>
Serial No.:	<u>MC01010A44</u>
Equipment No.:	<u>SA-03-04</u>
Date of Calibration	<u>19-Aug-2022</u>
Next Due Date	<u>19-Feb-2023</u>

1. Performance check of Wind Speed

Wind Speed, m/s		Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V2)	D = V1 - V2
0.0	0.0	0.0
1.5	1.5	0.0
2.5	2.6	-0.1
4.0	4.0	0.0

2. Performance check of Wind Direction

Wind Direction (°)		Difference D (°)
Wind Direction Reading (W1)	Marine Compass Value (W2)	$\mathbf{D} = \mathbf{W}1 - \mathbf{W}2$
0	0	0.0
90	90	0.0
180	180	0.0
270	270	0.0

Test Specification:

1. Performance Wind Speed Test - The wind meter was on-site calibrated against the anemometer

2. Performance Wind Direction Test - The wind meter was on-site calibrated against the marine compass at four direction